

ABSTRACT OF THE DISCLOSURE

An airbreathing fuel cell, in which a fuel can be adequately supplied to a cell part from outside even at low fuel pressures and air replacement can be easily performed to provide a stable power generating capacity, comprises a cell stack formed by stacking a plurality of those unit cells, which comprise a solid polymer electrolyte membrane, an oxygen passage plate and a fuel electrode, which are provided on both sides of the solid polymer electrolyte membrane to be opposed to each other, the oxygen passage plate provided adjacent and toward the oxygen electrode, and separator plates provided adjacent and outside the oxygen passage plate and the fuel electrode, the fuel distribution manifold being formed into a rod-shaped body having a polygonal-shaped cross section, a fuel supply passage formed in the tie bolt, and a plurality of fuel distribution passages provided to be communicated to the fuel supply passage and formed between central holes of the unit cells and an outer peripheral surface of the fuel distribution manifold.